STIC Database Tracking Number: 138296

TO: Shailendra Kumar
Location: 5c03 / 5c18
Saturday, November 20, 2004
Art Unit: 1621
Phone: 272-0640
Serial Number: 10 / 765602

From: Jan Delaval
Location: Biotech-Chem Library
Rem 1A51
Phone: 272-2504

jan.delaval@uspto.gov

Search Notes

Jan Please.

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: **S. Kumar**   Examiner #: **69544**   Date: **11/19/04**

Art Unit: **1625**   Phone Number 3 **2-0640**   Serial Number: **10 / 765 602**

Mail Box and Bldg/Room Location: **REM 5C03**   Results Format Preferred (circle): PAPER DISK E-MAIL
5C18

If more than one search is submitted, please prioritize searches in order of need.
***

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: **Dimer amido propyl dimethyl quaternary compounds**

Inventors (please provide full names): **Anthony J. O'Lenick Jr. et al.**

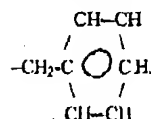Earliest Priority Filing Date: **1/28/2004**

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Claim 1 (Amended). A quaternary compound conforming to the following structure:
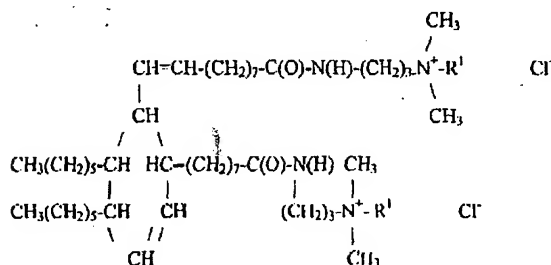
wherein;

R^1 is selected from the group consisting of -CH₃, ~~-CH₂-CH(OH)CH₂OH~~ and

Claim 2 (Original). A quaternary compound of claim 1 wherein R^1 is -CH₃.

Claim 3 (Cancel)

Searcher:			STN	✓
Searcher Phone #: **22504**	AA Sequence (#)		Dialog	
Searcher Location:	Structure (#)	✓	Questel/Orbit	
Date Searcher Picked Up: **4/20**	Bibliographic		Dr.Link	
Date Completed: **x/20**	Litigation		Lexis/Nexis	
Searcher Prep. Review Time:	Fulltext		Sequence Systems	
Clerical Prep Time: **10**	Patent Family		WWW/Internet	
Online Time: **+10**	Other		Other (specify)	

FTO-1590 (8-01)

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USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   18 NOV 2004   HIGHEST RN 784112-11-4
DICTIONARY FILE UPDATES:  18 NOV 2004   HIGHEST RN 784112-11-4

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

   Please note that search-term pricing does apply when
   conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

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L3                 STR
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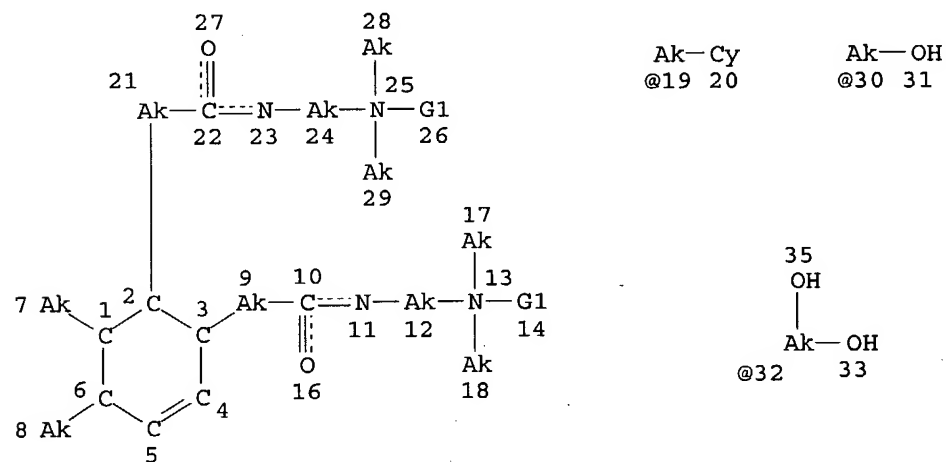


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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  33

STEREO ATTRIBUTES: NONE
L5              4 SEA FILE=REGISTRY CSS FUL L3
L6              2 SEA FILE=REGISTRY ABB=ON  PLU=ON  L5/COM


=> d ide can 16 tot

L6   ANSWER 1 OF 2  REGISTRY  COPYRIGHT 2004 ACS on STN
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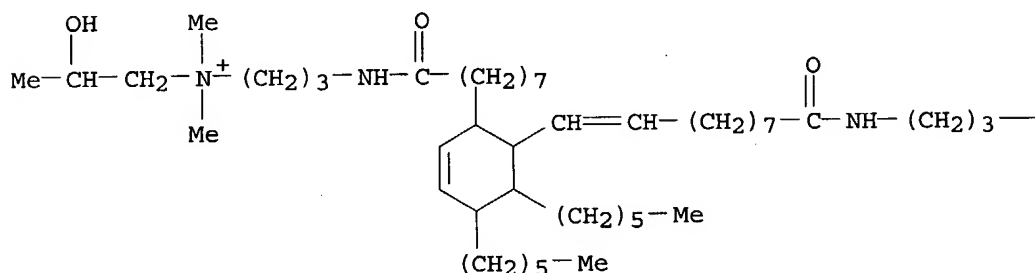
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CN   1-Propanaminium, 3-[[8-[4,5-dihexyl-6-[10-[[3-[(2-
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      1-yl]-1-oxooctyl]amino]-N-(2-hydroxypropyl)-N,N-dimethyl-, dinitrate
      (salt) (9CI)   (CA INDEX NAME)
MF   C52 H102 N4 O4 . 2 N O3
SR   CA
LC   STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: USES (Uses)

      CM   1

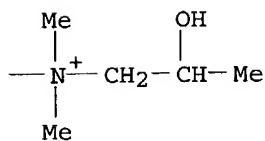   CRN   147831-23-0
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PAGE 1-A

PAGE 1-B

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      CMF   N O3
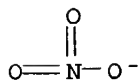
            1 REFERENCES IN FILE CA (1907 TO DATE)
   1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
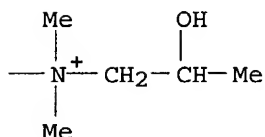
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CN   1-Propanaminium, 3-[[8-[4,5-dihexyl-6-[10-[[3-[(2-
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      1-yl]-1-oxooctyl]amino]-N-(2-hydroxypropyl)-N,N-dimethyl- (9CI)   (CA INDEX

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MF      C52 H102 N4 O4
CI      COM
SR      CA
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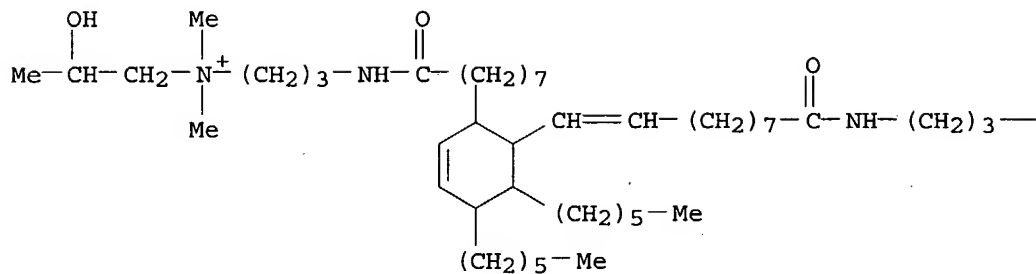
PAGE 1-B


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L4              1 S L3 CSS SAM
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                        SAV L5 KUMAR765/A
L6              2 S L5/COM

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L7                0 S L6

        FILE 'HCAPLUS' ENTERED AT 16:49:29 ON 20 NOV 2004
L8                1 S L6

        FILE 'USPATFULL, USPAT2' ENTERED AT 16:50:00 ON 20 NOV 2004
L9                0 S L6

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FILE COVERS 1907 - 20 Nov 2004   VOL 141 ISS 22
FILE LAST UPDATED: 18 Nov 2004   (20041118/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

=> d l8 all hitstr

L8   ANSWER 1 OF 1 HCAPLUS   COPYRIGHT 2004 ACS on STN
AN   1993:256656 HCAPLUS
DN   118:256656
ED   Entered STN: 26 Jun 1993
TI   Coating of plastic moldings after treatment with quaternary ammonium
      compound
IN   Akeboshi, Koji; Uohashi, Hiromichi; Shimizu, Shigeru; Hayashibe, Kunihiko
PA   Nihon GE Plastics, Ltd., Japan; Yoshimura Oil Chemical Co., Ltd.
SO   Jpn. Kokai Tokkyo Koho, 6 pp.
      CODEN: JKXXAF
DT   Patent
LA   Japanese
IC   ICM C08J007-04
      ICS B05D003-10; B05D007-02
CC   42-2 (Coatings, Inks, and Related Products)
      Section cross-reference(s): 46
FAN.CNT 1
      PATENT NO.   KIND   DATE   APPLICATION NO.   DATE
      ---------------   ----   --------   --------------------   --------
PI   JP 04202336   A2   19920723   JP 1990-333351   19901129
PRAI JP 1990-333351   19901129
CLASS
 PATENT NO.   CLASS   PATENT FAMILY CLASSIFICATION CODES
 ---------------   -----   ---
 JP 04202336   ICM   C08J007-04
                     ICS   B05D003-10; B05D007-02
GI

                 CH=CH(CH2)7CONH(CH2)3N+Me2CH2CH(OH)CH2OH
Me(CH2)5
                     (CH2)7CONH(CH2)3N+Me2CH2CH(OH)CH2OH

                                                    @ 2NO3-
Me(CH2)5   I
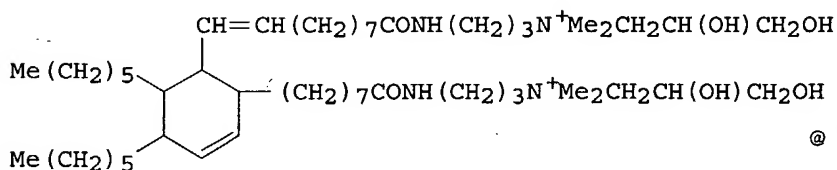
AB   Plastic moldings such as automobile bumpers or bodies are treated with
      surfactants containing ≥30% (non)cyclic dimer or trimer acid-based
      quaternary ammonium compds. before coating with primers to ensure low
      surface resistivity and give smooth top coatings. A GTX 6006

(polyamide-polyoxyphenylene blend) molding was soaked in aqueous H3PO4, washed
with water, dried, soaked in iso-PrOH containing 1% I (Elic PS 920), and dried
at 75° to give a sheet with resistivity 2.3 + 108 Ω-cm
initially and 7.7 + 108 Ω-cm after 30 min at 160°, vs.
6.8 + 108 and 1012, resp., with C17H35CONH(CH2)3N+Me2CH2CH2OH NO3-
instead of I.

ST   dimer acid ammonium surfactant primer; trimer acid ammonium surfactant
    primer; automobile coating primer surfactant pretreatment; bumper
    automobile coating surfactant

IT   Surfactants
     (ammonium compds., plastic moldings treated by, for primer and topcoat
     smoothness)

IT   Coating process
     (of plastic moldings, surfactant treatment in, for primer and topcoat
     smoothness)

IT   Automobiles
     (bumpers, coating of, ammonium surfactant in, for primer and topcoat
     smoothness)

IT   **147831-24-1**
    RL: USES (Uses)
     (surfactants, plastic moldings pretreated by, for primer and topcoat
     smoothness)

IT   **147831-24-1**
    RL: USES (Uses)
     (surfactants, plastic moldings pretreated by, for primer and topcoat
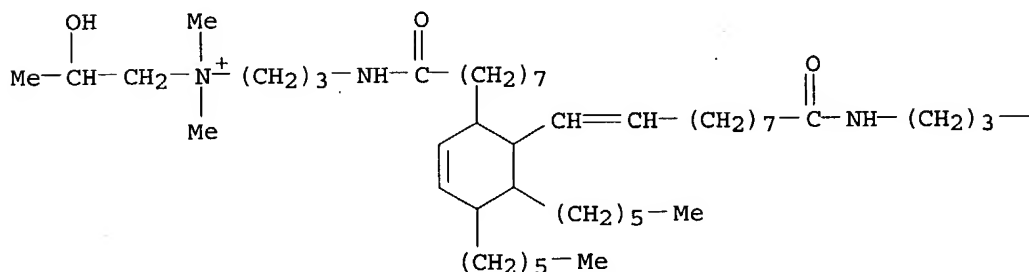   smoothness)

RN   147831-24-1   HCAPLUS

CN   1-Propanaminium, 3-[[8-[4,5-dihexyl-6-[10-[[3-[(2-
    hydroxypropyl)dimethylammonio]propyl]amino]-10-oxo-1-decenyl]-2-cyclohexen-
    1-yl]-1-oxooctyl]amino]-N-(2-hydroxypropyl)-N,N-dimethyl-, dinitrate
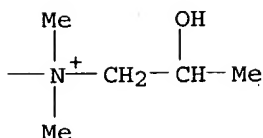   (salt) (9CI)   (CA INDEX NAME)

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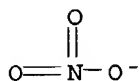   CRN   147831-23-0
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PAGE 1-A

PAGE 1-B

CM   2

CRN   14797-55-8
CMF   N O3

```
      O
      ‖
O══N─O⁻
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```
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FILE 'MARPAT' ENTERED AT 16:52:06 ON 20 NOV 2004
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FILE CONTENT: 1988-PRESENT (VOL 141 ISS 20)(20041112/ED)

MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES
(COVERAGE TO THESE DATES IS NOT COMPLETE):

US     6787678 07 SEP 2004
DE    10309682 09 SEP 2004
EP     1457483 15 SEP 2004
JP  2004247640 02 SEP 2004
WO  2004083203 30 SEP 2004

Structure search limits have been raised.  See HELP SLIMIT for the new,
higher limits.

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L3              STR
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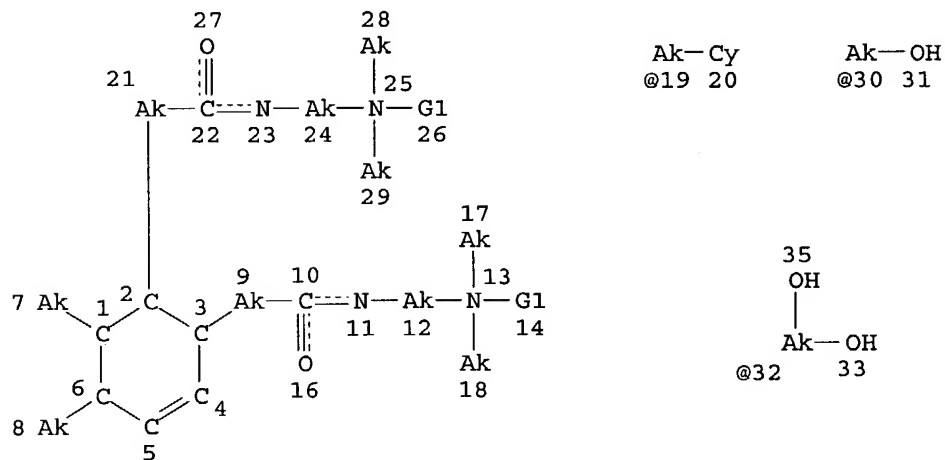
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          22 23 24   │26
                     Ak
                     29
                              17
                              Ak
            9   10            │13
   7 Ak  2 C    3  Ak─C┄┄N─Ak─N─G1          35
      1 C    C       ‖  11 12    14         OH
                     O                      │
   6 C    C₄ 4       16         Ak          Ak─OH
   8 Ak      C                  18       @32  33
            5
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VAR G1=AK/30/32/19
NODE ATTRIBUTES:
CONNECT IS M1  RC AT  20
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  33
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=> => fil beil
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COPYRIGHT (c) 2004 Beilstein-Institut zur Foerderung der Chemischen Wissenschaften
licensed to Beilstein GmbH and MDL Information Systems GmbH

FILE RELOADED ON OCTOBER 20, 2002
FILE LAST UPDATED ON NOVEMBER 3, 2004

FILE COVERS 1771 TO 2004.
*** FILE CONTAINS 9,073,068 SUBSTANCES ***

>>>PLEASE NOTE: Reaction Data and substance data are stored in
    separate documents and can not be searched together in one query.
    Reaction data for BEILSTEIN compounds may be displayed
    immediately with the display codes PRE (preparations) and REA
    (reactions). A substance answer set retrieved after the search
    for a chemical name, a compounds with available reaction
    information by combining with PRE/FA, REA/FA or more generally
    with RX/FA. The BEILSTEIN Registry Number (BRN) is the link
    between a BEILSTEIN compound and belonging reactions. For mo
    detailed reaction searches BRNs can be searched as reaction
    partner BRNs Reactant BRN (RX.RBRN) or Product BRN (RX.PBRN).<<<

>>> FOR SEARCHING PREPARATIONS SEE HELP PRE <<<

****
* PLEASE NOTE THAT THERE ARE NO FORMATS FREE OF COST.   *
* SET NOTICE FEATURE: THE COST ESTIMATES CALCULATED FOR SET NOTICE *
* ARE BASED ON THE HIGHEST PRICE CATEGORY. THEREFORE; THESE   *
* ESTIMATES MAY NOT REFLECT THE ACTUAL COSTS.   *
* FOR PRICE INFORMATION SEE HELP COST   *
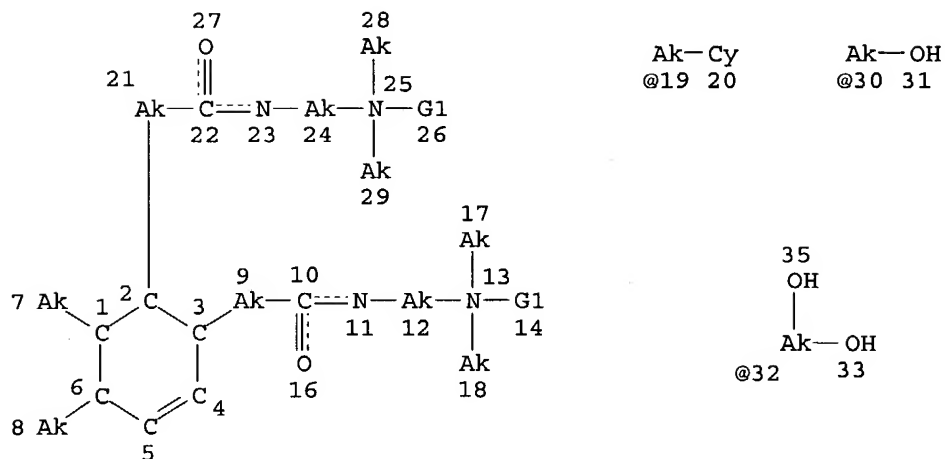***
    NEW
* PATENT NUMBERS (PN) AND BABS ACCESSION NUMBERS (BABSAN) CAN NOW BE
  SEARCHED, SELECTED AND TRANSFERRED.
* NEW DISPLAY FORMATS ALLREF, ALLP AND BABSAN SHOW ALL REFERENCES,
  ALL PATENT REFERENCES, OR ALL BABS ACCESSION NUMBERS FOR A
  COMPOUND AT A GLANCE.

=> d sta que

L3   STR

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          O               Ak
          ‖               |25
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   Ak—C═══N—Ak—N—G1        @19 20        @30 31
      22  23  24   |  26
          Ak
          29
                              17
                              Ak
                              |13                      35
       9   10                                          OH
 7 Ak  1 2 C  3                Ak—C═══N—Ak—N—G1         |
       C   C  Ak    11  12   |  14              Ak—OH
 7 Ak  1 2 C  3 C              ‖        Ak       @32  33
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    6         4                16
 8 Ak C       C 4
       C
       5
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VAR G1=AK/30/32/19
NODE ATTRIBUTES:
CONNECT IS M1 RC AT 20
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 33

STEREO ATTRIBUTES: NONE
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                  SAV L5 KUMAR765/A
L6   2 S L5/COM

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     FILE 'HCAPLUS' ENTERED AT 16:49:29 ON 20 NOV 2004
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L9   0 S L6·

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                SAV L14 KUMAR765B/A

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